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# The Home FRUIT GARDEN

In the Southeastern and  
Central Southern States



Leaflet 219

United States Department of Agriculture

# THE HOME FRUIT GARDEN IN THE SOUTHEASTERN AND CENTRAL SOUTHERN STATES <sup>1</sup>

In almost every part of this country certain fruits and nuts can be grown successfully in farm or suburban fruit gardens. Fruits that need spraying are not well suited for home production. In all areas, however, fruit trees and bunch grapes are benefited by proper spraying; and, in the vicinity of commercial orchards and vineyards, fruits in the home garden should be sprayed to prevent the spread of insects and diseases. By properly selecting the kinds and varieties of fruit for home planting, a succession of fresh fruit of high dessert quality can be had during much of the summer. Surpluses can be canned, preserved, dried, or in some cases frozen for use during other seasons.

## Climatic Districts for Fruits and Nuts

Summer and winter temperatures, rainfall, and prevalence of diseases and insects are all important in determining the varieties that can be grown in the different parts of the country. Although many fruit and nut varieties are not hardy in parts of this region, some kinds can be grown in almost every home garden. On the map shown in figure 1 the southeastern and central Southern States are divided into districts, based chiefly on the length of the growing season. In general, the same fruit and nut varieties can be grown throughout a district.

## Kinds and Varieties To Plant

Under most conditions in this region the best fruits and nuts for the home garden are, in order of adaptability where spraying is not practiced, (1) grapes (muscadine), (2) pecans, (3) figs, (4) strawberries, (5) blackberries, trailing, (6) blueberries (rabbiteye varieties), (7) pears, (8) blackberries, erect, (9) bunch (American) grapes, (10) peaches, (11) plums, (12) apples, and (13) raspberries. Under the more subtropical conditions, several citrus fruits—guavas, oriental persimmons, feijoas, loquats, pomegranates, papayas—may be grown. In certain locations black walnuts and Chinese chestnuts may well be included.

Muscadine grapes are adapted to the greatest number of locations and conditions, except in the more northern districts, where the bunch grapes are better adapted. The muscadines produce heavily without spraying and furnish fresh fruit over a long period as well as fruit for jelly, preserves, and beverages.

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<sup>1</sup>Prepared by Horticultural Crops Research Branch, Agricultural Research Service, with the collaboration of horticulturists of the States in the region. The varieties suggested herein are based on those recommended by these horticulturists.

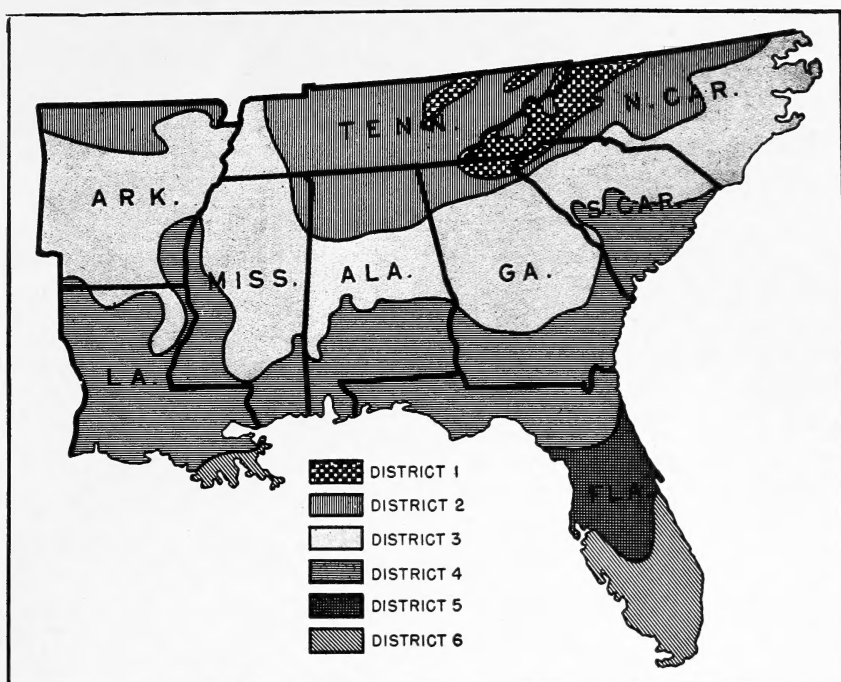


FIGURE 1.—Map of the southeastern and central Southern States. District 1—Relatively high areas, growing seasons ranging from 150 to 180 days, temperate climatic conditions prevailing; suitable for growing standard northern fruit varieties. District 2—Growing seasons ranging from 180 to 200 days; many standard southern fruit varieties not grown in district 1 thrive. District 3—Upper boundary corresponds roughly with the northern limit of the Cotton Belt; pecans, muscadine grapes, and many other desirable fruit varieties may be grown. District 4—Southern part of the Coastal Plain area, characterized by a hot, humid climate during the growing season; typically southern fruits, including muscadine grapes and figs, thrive best. District 5—Citrus fruits are grown principally, but other southern fruits may be grown advantageously in the home garden. District 6—Hot, humid area; only semitropical fruits are adapted.

Pecans are very widely used as, and are well adapted for, shade trees for the home and yard. The fig also is well suited to most of this region. It should never be cultivated, but it should be planted near a building or in a part of the yard that is kept in grass; otherwise it is soon killed by root knot nematodes.

Strawberries are also well adapted to this region and are the first fruit to ripen.

The Young and Boysen trailing blackberries succeed except in central and southern Florida and in the high mountains. They grow vigorously and produce an abundance of high-flavored fruit 1 year after planting.

Strawberries, trailing blackberries, figs, and grapes cover the season from April or May till frost in most of this region. Larger gardens that include blueberries, pecans, pears, peaches, plums, and other fruits will furnish a greater variety of fresh fruit during much of the year.

The varieties recommended for medium-sized gardens in different

TABLE 1.—*Varieties suggested for medium-sized gardens in representative parts of districts shown in figure 1*

DISTRICT 1 (MOUNTAINS OF NORTH CAROLINA, EASTERN TENNESSEE, SOUTH CAROLINA, AND GEORGIA)

| Fruit or nut | Variety         | When ripe      | Plants | Length of row <sup>1</sup> | Fruit or nut   | Variety          | When ripe      | Plants | Length of row <sup>1</sup> |
|--------------|-----------------|----------------|--------|----------------------------|----------------|------------------|----------------|--------|----------------------------|
|              |                 |                | No.    | Ft.                        |                |                  |                | No.    | Ft.                        |
| Strawberry.. | Midland.....    | May-June.....  | 25     | 50                         | Cherry.....    | Montmorency..... | June.....      | 2      | 30                         |
|              | Catskill.....   | June.....      | 25     | 50                         |                | Seckel.....      | Aug.-Sept..... | 2      | 40                         |
| Grape.....   | Portland.....   | July.....      | 3      | 24                         | Pear.....      | Waite.....       | Sept.-Oct..... | 2      | 40                         |
|              | Delaware.....   | do.....        | 3      | 24                         |                | Kieffer.....     | do.....        | 2      | 40                         |
|              | Niagara.....    | August.....    | 3      | 24                         |                | Lodi.....        | July.....      | 1      | 30                         |
| Blackberry.. | Concord.....    | do.....        | 3      | 24                         | Apple.....     | Stayman.....     | Sept.....      | 1      | 30                         |
|              | Eldorado.....   | June-July..... | 30     | 120                        |                | Winesap.....     | do.....        | 1      | 30                         |
| Raspberry..  | Sunrise.....    | June.....      | 20     | 50                         |                | Winesap.....     | Oct.....       | 1      | 30                         |
|              | Taylor.....     | July.....      | 20     | 50                         | Blueberry...   | Earlblue.....    | July.....      | 2      | 10                         |
|              | Dixired.....    | June.....      | 2      | 40                         |                | Bluecrop.....    | do.....        | 2      | 10                         |
| Peach.....   | Redhaven.....   | June-July..... | 2      | 40                         |                | Herbert.....     | do.....        | 2      | 10                         |
|              | Halehaven.....  | July.....      | 2      | 40                         | Black wal-nut. | Thomas.....      | Sept.....      | 1      | ( <sup>2</sup> )           |
|              | Elberta.....    | Aug.....       | 2      | 40                         |                | Ohio.....        | Oct.....       | 1      | ( <sup>2</sup> )           |
| Plum.....    | Gold.....       | July.....      | 2      | 40                         |                |                  |                |        |                            |
|              | Methley.....    | Aug.....       | 2      | 40                         |                |                  |                |        |                            |
|              | Shropshire..... | Sept.....      | 2      | 40                         |                |                  |                |        |                            |

DISTRICT 2 (PIEDMONT AND HIGHER LANDS OF NORTH CAROLINA, SOUTH CAROLINA, GEORGIA, ALABAMA, TENNESSEE, AND NORTHERN ARKANSAS)

|                        |                              |                |    |    |                |                             |                |   |                  |
|------------------------|------------------------------|----------------|----|----|----------------|-----------------------------|----------------|---|------------------|
| Strawberry..           | Blakemore.....               | May.....       | 25 | 50 | Pear.....      | Seckel.....                 | Aug.....       | 1 | 20               |
|                        | Albritton <sup>1</sup> ..... | do.....        | 25 | 50 |                | Waite.....                  | Sept.....      | 2 | 40               |
|                        | Tennessee.....               | do.....        | 25 | 50 |                | Kieffer.....                | do.....        | 2 | 40               |
| Grape.....             | Beauty.....                  | July.....      | 3  | 24 | Apple.....     | Lodi.....                   | July-Aug.....  | 1 | 30               |
|                        | Fredonia.....                | July-Aug.....  | 3  | 24 |                | Stayman.....                | Sept.....      | 1 | 30               |
|                        | Niagara.....                 | Aug.....       | 3  | 24 |                | Winesap.....                | do.....        | 1 | 30               |
| Blackberry (trailing). | Concord.....                 | do.....        | 3  | 24 | Blueberry...   | Golden Delicious.....       | do.....        | 1 | 30               |
|                        | Young.....                   | June.....      | 10 | 60 |                | Winesap.....                | Oct.....       | 1 | 30               |
|                        | Boysen.....                  | June-July..... | 10 | 60 |                | Earlblue <sup>2</sup> ..... | June.....      | 3 | 15               |
| Peach.....             | Dixired.....                 | June.....      | 2  | 40 | Blueberry...   | Bluecrop <sup>3</sup> ..... | do.....        | 3 | 15               |
|                        | Redhaven.....                | do.....        | 2  | 40 |                | Herbert <sup>3</sup> .....  | do.....        | 3 | 15               |
|                        | July Elberta.....            | July.....      | 40 | 40 |                | Homebell.....               | July-Aug.....  | 3 | 24               |
| Plum.....              | Elberta.....                 | July-Aug.....  | 40 | 40 | Fig.....       | Tifblue.....                | do.....        | 3 | 24               |
|                        | Gold.....                    | June-July..... | 40 | 40 |                | Celeste.....                | June-July..... | 1 | ( <sup>4</sup> ) |
|                        | Methley.....                 | July.....      | 40 | 40 |                | Brown Turkey.....           | do.....        | 1 | ( <sup>4</sup> ) |
| Cherry.....            | Shropshire.....              | Aug.-Sept..... | 2  | 40 | Pecan.....     | Moore.....                  | Oct.....       | 2 | ( <sup>5</sup> ) |
|                        | Montmorency.....             | June.....      | 2  | 30 |                | Stuart.....                 | do.....        | 2 | ( <sup>4</sup> ) |
|                        |                              |                |    |    |                | Thomas.....                 | Sept.....      | 1 | ( <sup>5</sup> ) |
|                        |                              |                |    |    | Black wal-nut. | Ohio.....                   | do.....        | 1 | ( <sup>5</sup> ) |
|                        |                              |                |    |    |                |                             |                |   |                  |

DISTRICT 3 (EASTERN NORTH CAROLINA TO ARKANSAS)

|                        |                                |                |    |                  |              |                       |                |   |                  |
|------------------------|--------------------------------|----------------|----|------------------|--------------|-----------------------|----------------|---|------------------|
| Strawberry..           | Blakemore.....                 | April-May..... | 25 | 50               | Peach.....   | Dixired.....          | June.....      | 1 | 20               |
|                        | Albritton <sup>2</sup> .....   | do.....        | 25 | 50               |              | Dixigen.....          | do.....        | 1 | 20               |
|                        | Extra.....                     | Aug.....       | 2  | 16               |              | Southland.....        | June-July..... | 1 | 20               |
| Grape.....             | Champanel.....                 | do.....        | 2  | 16               | Pear.....    | Belle of Georgia..... | July.....      | 1 | 20               |
|                        | Thomas.....                    | Sept.....      | 1  | ( <sup>7</sup> ) |              | Elberta.....          | July-Aug.....  | 2 | 40               |
|                        | Hunt <sup>6</sup> .....        | do.....        | 1  | ( <sup>7</sup> ) |              | Orient.....           | Aug.-Sept..... | 1 | 20               |
| Blackberry (trailing). | Scuppernong <sup>6</sup> ..... | do.....        | 1  | ( <sup>7</sup> ) | Plum.....    | Kieffer.....          | do.....        | 1 | 20               |
|                        | Yuga <sup>6</sup> .....        | do.....        | 1  | ( <sup>7</sup> ) |              | Baldwin.....          | do.....        | 1 | 20               |
|                        | Topsail <sup>6</sup> .....     | do.....        | 1  | ( <sup>7</sup> ) |              | Methley.....          | June.....      | 1 | 20               |
| Fig.....               | Young.....                     | June.....      | 20 | 120              | Pomegranate. | Shiro.....            | June-July..... | 1 | 20               |
|                        | Boysen.....                    | do.....        | 10 | 60               |              | Santa Rosa.....       | do.....        | 1 | 20               |
|                        | Celeste.....                   | June-July..... | 1  | ( <sup>4</sup> ) |              | Shiro.....            | Sept.-Oct..... | 2 | 30               |
| Blueberry...           | Wolcott.....                   | do.....        | 4  | 32               | Pomegranate. | Fuya.....             | Oct.....       | 2 | 30               |
|                        | Murphy.....                    | do.....        | 4  | 32               |              | Wonderful.....        | Aug.-Oct.....  | 2 | ( <sup>2</sup> ) |
|                        | Homebell.....                  | do.....        | 4  | 32               |              |                       |                |   |                  |
| Pecan.....             | Tifblue.....                   | do.....        | 4  | 32               |              |                       |                |   |                  |
|                        | Moore.....                     | Oct.....       | 2  | ( <sup>5</sup> ) |              |                       |                |   |                  |
|                        | Money-maker <sup>3</sup> ..... | do.....        | 2  | ( <sup>5</sup> ) |              |                       |                |   |                  |
|                        | Stuart.....                    | do.....        | 2  | ( <sup>5</sup> ) |              |                       |                |   |                  |

<sup>1</sup> Or distance between trees.

<sup>2</sup> In yard.

<sup>3</sup> Not recommended for Tennessee or Arkansas.

<sup>4</sup> 2 feet from building.

<sup>5</sup> 60 feet apart around buildings or in yard.

<sup>6</sup> Plant perfect-flowered Burgaw with these muscadine grapes.

<sup>7</sup> On arbor or wire trellis 20 feet apart.

<sup>8</sup> For southern parts only.

<sup>9</sup> For South Carolina.

TABLE 1.—*Varieties suggested for medium-sized gardens in representative parts of districts shown in figure 1—Continued*

DISTRICT 4 (EASTERN SOUTH CAROLINA, SOUTHERN GEORGIA, AND THE GULF COAST REGION TO LOUISIANA)

| Fruit or nut          | Variety                    | When ripe | Plants | Length of row <sup>1</sup> | Fruit or nut        | Variety              | When ripe  | Plants | Length of row <sup>1</sup> |
|-----------------------|----------------------------|-----------|--------|----------------------------|---------------------|----------------------|------------|--------|----------------------------|
|                       |                            |           | No.    | Ft.                        |                     |                      |            | No.    | Ft.                        |
| Strawberry            | Klonmore                   | Mar.-May  | 25     | 50                         | Pear                | Baldwin              | Aug.       | 2      | 40                         |
|                       | Florida 90                 | April-May | 25     | 50                         |                     | Kieffer              | do         | 2      | 40                         |
|                       | Extra                      | July-Aug. | 2      | 16                         |                     | Pineapple            | do         | 2      | 40                         |
|                       | Champanel                  | Aug.      | 2      | 16                         |                     | Wild Goose           | June       | 1      | 20                         |
| Grape                 | Thomas <sup>6</sup>        | Sept.     | 2      | ( <sup>7</sup> )           | Plum                | Methley              | do         | 2      | 40                         |
|                       | Hunt <sup>6</sup>          | do        | 2      | ( <sup>7</sup> )           |                     | Bruce                | do         | 2      | 40                         |
|                       | Scuppernong                | do        | 2      | ( <sup>7</sup> )           |                     | Excelsior            | June-July  | 2      | 40                         |
|                       | Yusa, <sup>6</sup> or      |           |        |                            |                     | Tanenashi            | Sept.      | 2      | 30                         |
| Blackberry (trailing) | Young                      | May-June  | 10     | 60                         | Oriental persimmon. | Fuya                 | do         | 2      | 30                         |
|                       | Boysen                     | do        | 10     | 60                         |                     | Wonderful            | Aug.-Oct.  | 2      | ( <sup>2</sup> )           |
| Fig                   | Celeste                    | June-July | 1      | ( <sup>4</sup> )           | Feljoa              | Coolidge             | Oct.       | 2      | 20                         |
|                       | Green Ischia               | June-Aug. | 1      | ( <sup>4</sup> )           |                     | Tanaka               | Spring     | 1      | 15                         |
| Blueberry             | Homebell                   | June-July | 4      | 32                         | Loquat              | Wase                 | Oct.       | 1      | 30                         |
|                       | Tifblue                    | June-Aug. | 4      | 32                         |                     | OWari                | Oct.-Nov.  | 2      | 30                         |
|                       | Moore                      | Oct.      | 2      | ( <sup>3</sup> )           | Satsuma             | Glen                 | Sept.-Dec. | 2      | 30                         |
| Pecan                 | Mooney-maker, <sup>9</sup> | do        | 2      | ( <sup>3</sup> )           |                     | Calamondin.          | Oct.-Jan.  | 2      | 30                         |
|                       | Stuart                     | do        | 2      | ( <sup>4</sup> )           | Kumquat             | Nagami               | Nov.-Feb.  | 2      | ( <sup>2</sup> )           |
| Peach                 | Maygold                    | May       | 2      | 40                         |                     | Cattley <sup>4</sup> | Oct.-Nov.  | 4      | 40                         |
|                       | Southland                  | June      | 2      | 40                         |                     |                      |            |        |                            |
|                       | Jewel                      | do        | 2      | 40                         |                     |                      |            |        |                            |

DISTRICT 5 (CENTRAL FLORIDA)

|            |               |            |   |                  |                       |                 |              |   |                  |
|------------|---------------|------------|---|------------------|-----------------------|-----------------|--------------|---|------------------|
| Orange     | Hamlin        | Oct.-Nov.  | 1 | 20               | Pecan <sup>10</sup>   | Moore           | Sept.-Oct.   | 1 | ( <sup>3</sup> ) |
|            | Pineapple     | Dec.-Feb.  | 1 | 20               |                       | Stuart          | do           | 1 | ( <sup>3</sup> ) |
|            | Valencia      | Mar.-June  | 1 | 20               |                       | Gottfried       | July-Sept.   | 1 | 20               |
| Grapefruit | Duncan        | Nov.-Mar.  | 1 | 20               | Avocado <sup>11</sup> | Lula            | Nov.-Dec.    | 1 | 20               |
|            | Ruby Red      | Dec.-Feb.  | 1 | 20               |                       | Taylor          | Dec.-Jan.    | 1 | 20               |
|            | Marsh         | Jan.-May   | 1 | 20               |                       | Winter Mexican. | Dec.-Feb.    | 1 | 20               |
| Tangerine  | Clementine    | Oct.-Dec.  | 1 | 20               | Mango <sup>11</sup>   | Haden           | June-July    | 1 | 30               |
|            | Dancy         | Dec.-Feb.  | 1 | 20               |                       | Zill            | July         | 1 | 30               |
|            | Temple        | Jan.-Mar.  | 1 | 20               |                       | Kent            | Aug.         | 1 | 30               |
| Tangelo    | Orlando       | Nov.-Dec.  | 1 | 20               | Papaya                | Brooks          | Sept.        | 1 | 30               |
|            | Mineola       | Dec.-Jan.  | 1 | 20               |                       | Seedlings       | Entire year. | 4 | 40               |
| Lemon      | Seminole      | Feb.-May   | 1 | 20               | Banana                | Lady Finger     |              | 2 | 10               |
| Calamondin | Meyer         | Oct.-Jan.  | 1 | 15               |                       | Cavendish       |              | 2 | 10               |
| Kumquat    | Nagami        | Nov.-Mar.  | 1 | ( <sup>2</sup> ) | Guava                 | Seedlings       | Aug.-Nov.    | 4 | 40               |
|            | Meiwa         | do         | 1 | ( <sup>2</sup> ) |                       | Cattley         | Oct.-Nov.    | 2 | 20               |
| Fig        | Celeste       | April-June | 1 | ( <sup>4</sup> ) |                       |                 |              |   |                  |
|            | Brown Turkey. | do         | 1 | ( <sup>4</sup> ) |                       |                 |              |   |                  |

DISTRICT 6 (SOUTHERN FLORIDA)

|            |                   |              |   |    |                       |               |              |   |                  |
|------------|-------------------|--------------|---|----|-----------------------|---------------|--------------|---|------------------|
| Orange     | Hamlin            | Oct.-Nov.    | 1 | 20 | Fig                   | Celeste       | April-June   | 1 | ( <sup>3</sup> ) |
|            | Pineapple         | Dec.-Feb.    | 1 | 20 |                       | Brown Turkey. | do           | 1 | ( <sup>3</sup> ) |
|            | Valencia          | Mar.-June    | 1 | 20 |                       | Waldin        | Oct.-Nov.    | 1 | 20               |
| Grapefruit | Duncan            | Nov.-Mar.    | 1 | 20 | Avocado <sup>11</sup> | Booth No. 8.  | Nov.-Dec.    | 1 | 20               |
|            | Ruby Red          | Dec.-Feb.    | 1 | 20 |                       | Taylor        | Dec.-Jan.    | 1 | 20               |
|            | Marsh             | Jan.-Mar.    | 1 | 20 |                       | Nabal         | Jan.-Feb.    | 1 | 20               |
| Tangerine  | Clementine        | Oct.-Dec.    | 1 | 20 | Mango <sup>11</sup>   | Haden         | June-July    | 1 | 30               |
|            | Dancy             | Dec.-Feb.    | 1 | 20 |                       | Brooks        | July-Sept.   | 1 | 30               |
|            | Temple            | Jan.-Mar.    | 1 | 20 |                       | Cambodiana.   | Jan.-Feb.    | 1 | 30               |
| Tangelo    | Orlando           | Nov.-Dec.    | 1 | 20 | Papaya                | Seedlings     | Entire year. | 4 | 40               |
|            | Mineola           | Dec.-Jan.    | 1 | 20 |                       | Lady Finger   |              | 2 | 10               |
| Lemon      | Seminole          | Feb.-May     | 1 | 20 | Banana                | Cavendish     |              | 2 | 10               |
| Lime       | Ferrine           |              | 1 | 20 |                       | Seedlings     | Aug.-Nov.    | 4 | 40               |
|            | Tahiti (Persian). | Everbearing. | 1 | 20 |                       | Cattley       | Oct.-Nov.    | 2 | 20               |

<sup>10</sup> For northern part only.

<sup>11</sup> If space is lacking, several varieties may be grafted on a single stock; for warmer locations only.

districts are given in table 1. Some of the varieties suggested are different from those grown in commercial plantings. Usually more than one variety is listed in order to cover a long season. Two or more varieties each of pears, perfect-flowered Chinese chestnuts, some plums, muscadine grapes (including one perfect-flowered vine), apples, blueberries, and avocados must be planted to insure pollination.

### Planting and Care

**SOURCES OF PLANTS.**—Fruits adapted to this region are propagated by cuttings and grafting or budding. Exceptions are guavas, papayas, and occasionally oranges and a few others, which are grown from seed. Fruit varieties are propagated by commercial nurserymen, who are generally dependable sources. Names of nurseries can be supplied by the State agricultural extension service.

**LOCATION OF PLANTING.**—Although it is generally desirable to have the planting near the house and perhaps adjacent to the vegetable garden, this may not be the most favorable location. The planting should not be in a low or frosty area but on moderately elevated land or on a slope that will provide satisfactory air drainage. The soil should be reasonably fertile and well drained. A location where the soil tends to remain wet after rain should be avoided. Pecans need a deep soil and figs a site where the roots can run under a building. Fruit trees should not be planted near wood lots or shade trees, since full exposure to sunlight is needed.

**SIZE OF PLANTING.**—The size of the planting is determined by the available space, by the needs of the family, and by the kinds of fruit that can be grown. Most small gardens (10 by 50 feet to 30 by 50 feet) should consist mostly of berries and grapes. A half-acre garden that includes fruit and nut trees will furnish fruit in season for a large family (fig. 2).

**WHEN TO PLANT.**—In the northern districts usually a better stand of trees and plants is obtained by setting them in the fall or as early in the spring as possible; in the other districts planting may be done during late fall or winter. It is important that the plants be dormant.

**HOW TO PLANT.**—Prepare the ground as thoroughly as for a vegetable garden. Do not allow the roots of plants to dry out. Set berries and grapes at the same depth as they grew in the nursery and fruit and nut trees slightly deeper. Spread out the roots when setting the trees or plants. Separate the topsoil and subsoil when digging the holes. Place the topsoil about the roots, and fill up the hole with the subsoil. Thoroughly firm the soil about the roots to prevent drying out and to help hold the tree in position.

**PRUNING BEFORE PLANTING.**—Pick off all fully developed leaves before planting strawberries. Cut back blackberry and raspberry canes to 6 inches. Grapevines are usually cut back to one or two buds. If fruit trees are unbranched whips, head them back to a height of 3 to 3½ feet. If they have several good-sized branches well spaced along the trunk, three or four may be left. The branches should be spaced about a foot apart up and down the trunk and should point in different directions.

**CULTIVATION.**—The cultivation of the home fruit garden is similar to that of the vegetable garden for the first part of the season. After



about September 1 cultivation of fruit trees, vines, and bushes should cease. Cultivate strawberries until the end of the growing season. Under most conditions the same methods of maintaining the fertility of the soil that are followed in a vegetable garden are successful with fruit. Where stable manure is available, its liberal use generally gives excellent results.

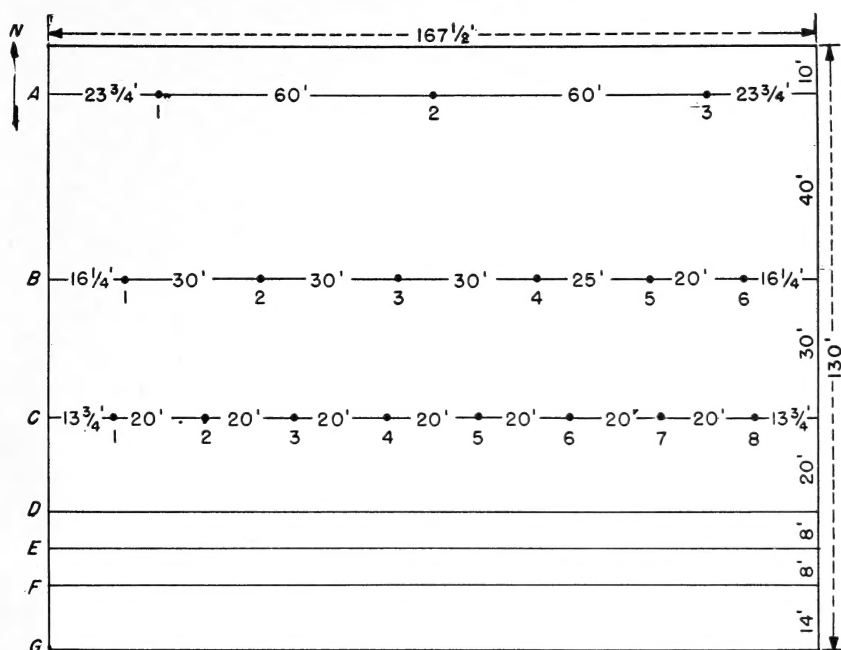


FIGURE 2.—Suggested arrangement of a half-acre fruit and nut garden in northern districts. Row A—Nos. 1 to 3, pecans. Row B—Nos. 1 to 4, apples; Nos. 5 and 6, pears. Row C—Nos. 1 to 3, plums; Nos. 4 to 8, peaches. Row D—trailing blackberries (Young and Boysen). Row E—raspberries (half row; one variety); erect blackberries (half row; one variety). Row F—strawberries (two varieties). Row G—bunch or muscadine grapes on a wire trellis or on a fence used as a trellis. Fruit and nut trees should be placed on the north side, if possible, to avoid shading of small fruits.

All berry plants should be given clean cultivation unless there is an abundance of straw or other material to furnish a permanent mulch. Fruit trees may be cultivated for the first 3 or 4 years if it is not possible to mulch them with straw or strawy manure. Thereafter apples, pears, plums, cherries, and nuts may be kept in sod. Peaches and grapes do best when they receive some cultivation, but they can also be grown in grass and mulched. Manure mulch will take care of the fertilizer requirements of the fruit plants. When manure is not available, use a fertilizer high in nitrogen.

**PRUNING AFTER THE FIRST YEAR.**—The purpose of pruning is to develop the tree or bush so that it will have maximum strength to carry a load of fruit and maximum bearing capacity. A safe rule in pruning trees, particularly trees up to bearing age, is to prune them as little as will accomplish this specific purpose. Remove cross branches, suckers,

and broken or dying limbs. Young trees of most fruits require little pruning before they come into bearing. Pruning of fruit trees in general should be done during the dormant season, preferably in the spring after danger of severe winter freezing is past but before growth has started.

If the vine growth of bunch grapes is rather weak during the first growing season, it is advisable to cut the vine back at the end of the season to one or two buds and to train up a strong trunk during the second growing season. If the vine is to be trained to a two-wire system, tie it to a stake and let it grow upright until it reaches the top wire. At that point pinch it off and lead out a lateral in each direction along the wire. During the second season, lateral canes will grow from all the buds along the trunk. Select two of these at the height of the first wire above the ground and tie them to that wire to develop fruiting wood. Rub off or pinch back the other branches along the trunk during the growing season. A vine can be trained to a fence in much the same manner.

Prune while the vines are in a dormant condition. As the fruit is borne on shoots from the canes of the previous season's growth, it is important that enough new wood be saved to provide for the next summer's crop. With healthy, vigorous vines, from 50 to 60 buds will produce as much fruit as the vine can mature properly. More wood may be left on vines for home production, provided sufficient space is available for the vine to develop. With vigorous vines, leaving more wood may result in a greater total quantity of fruit, but the individual bunches may be inferior in size and the fruit of poorer quality.

Vines of muscadine grapes are pruned somewhat differently. With these the canes trained on the wires serve as permanent arms, and the new growth is pruned so as to leave fruiting spurs 6 to 8 inches long. Such spurs should be evenly distributed along the arm and so spaced as to allow free development of new shoots. Remove all excess wood.

Except in the mountain region remove all the canes from blackberries, both old and new, after the fruit has been picked. New canes will then develop strong growth to produce fruit for the following season. In the western part of North Carolina and South Carolina, in northern Georgia, and in Tennessee the season is not long enough for strong new canes to grow. There, just the old canes that have fruited should be cut out after the fruit has been picked. The new canes of trailing blackberries are left till the following spring, when they are tied in a spiral to stakes about 6 feet above ground. Winter pruning of the blackberry consists in cutting back lateral branches to about 12 inches. Old canes of raspberries are also removed after the fruit is picked. New shoots of black varieties are pinched or cut off at 12 to 18 inches in height, and the following winter the branches are pruned to 12 inches in length. Red raspberry canes are not usually pruned back.